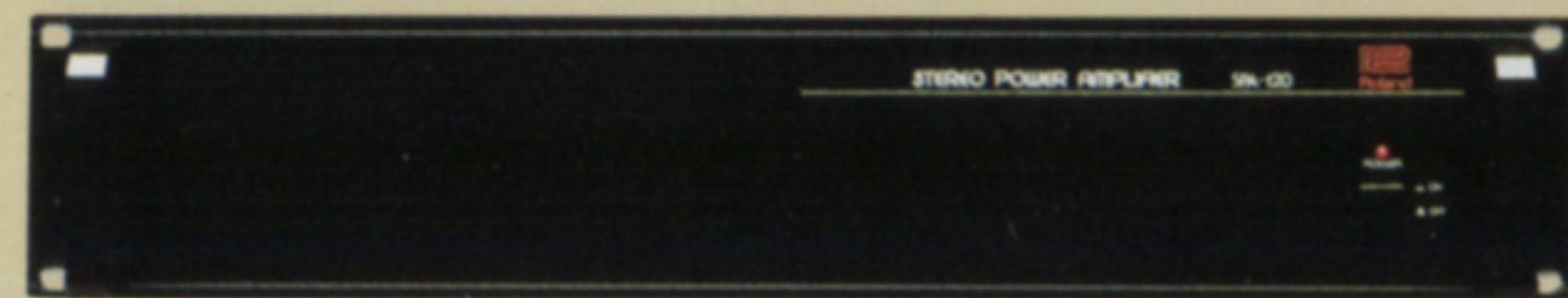
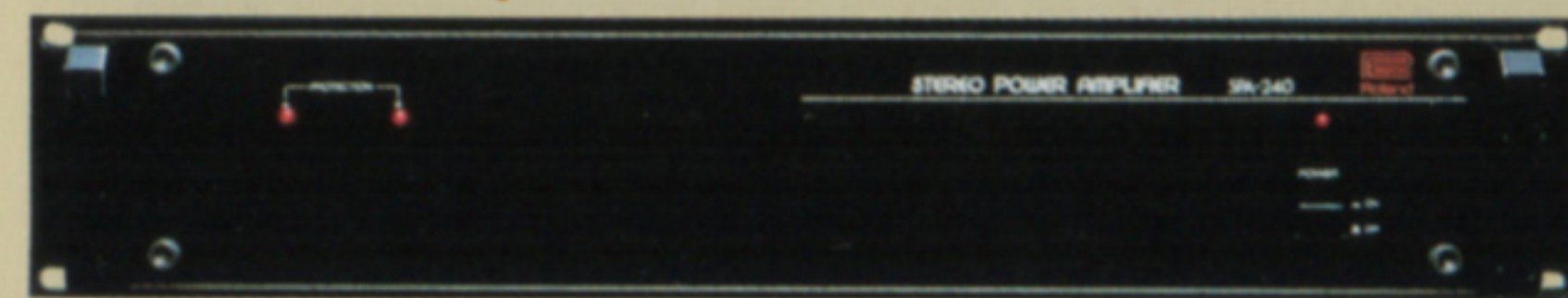


# THE ROLAND RACKS

## SPA-240/120 STEREO POWER AMPLIFIER



The SPA-120 features 60W per channel (at 8Ω) and the SPA-240 features 120W per channel (at 8Ω). Stereo Amplification of a musical instrument is especially appreciated when using stereo flanging or other time delay effects.

- Power output per channel: SPA-240; 120W at 8Ω (mono 360W), SPA-120; 60W at 8Ω (mono 160W) • Note: power will increase more than 50% when rated at 4Ω • T.H.D.: Better than 0.05% • S/N: Better than 110dB • Frequency response: 10Hz to 100KHz • Input sensitivity: +4dBm for rated output • Input impedance: Balanced; 26KΩ (XLR connectors), Unbalanced; 50KΩ (1/4" phone jacks) • Outputs: Binding posts • Dimensions: SPA-240; 482(W) x 922(H) x 265(D)mm (19.0" x 3.6" x 13.5"), SPA-120; 482(W) x 92(H) x 442(D)mm (19.0" x 3.6" x 10.5") • Weight: SPA-240; 14Kg (30.8lbs.), SPA-120; 7.5Kg (16.5lbs.)

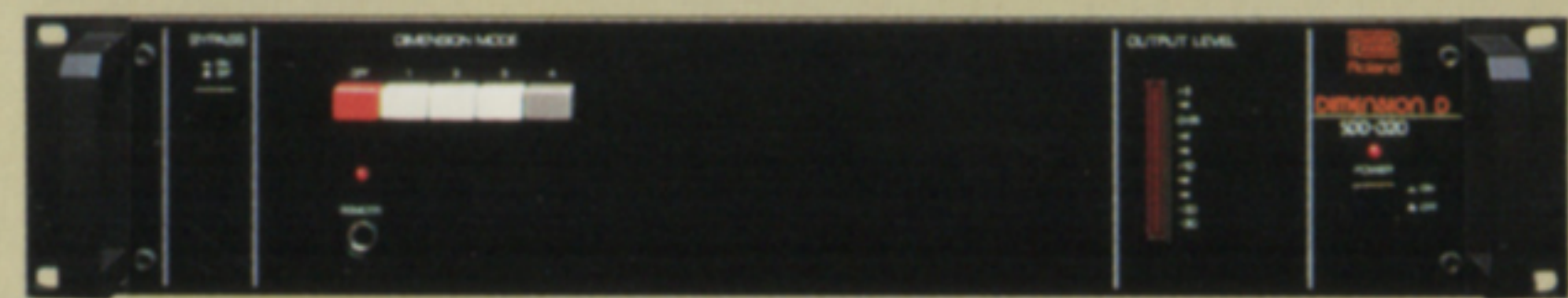
## SIP-300 GUITAR PREAMPLIFIER



The Roland Guitar Preamplifier has been designed to give the guitarist complete control over his instrument's amplification. The Guitar Preamp allows the guitarist to split his amplification set-up into separate components which permits absolute flexibility in custom tailoring his sound.

- Input level: HI; min -38dBm (10mV), max +14dBm (4V), LO; min -28dBm (30mV), max +24dBm (2V) • Input impedance: HI; 250KΩ, LO; 100KΩ • Output level: Balanced; nom +4dBm (1.23V), max +20dBm (7.75V), Unbalanced; nom +0.5dBm (820mV), max +16dBm (4.8V) • Output impedance: 600Ω (balanced and unbalanced) • Frequency range: 20Hz to 30KHz • S/N: Greater than 74dB (Nominal operating levels) • Distortion: 0.1% (20Hz ~ 10KHz, +10dBm Unbalanced) • Overdrive maximum gain: 42dB • Hi cut filter cutoff: 6KHz, -12dB/octave • Low cut filter cutoff: 60Hz, -12dB/octave • Tone selector switches: Treble; 6KHz/9KHz, Middle; 500Hz/1KHz, Bass; 40Hz/50Hz • Dimensions: 482(W) x 92(H) x 247(D)mm (19.0" x 3.6" x 9.7") • Weight: 4.0Kg (8.8lbs.)

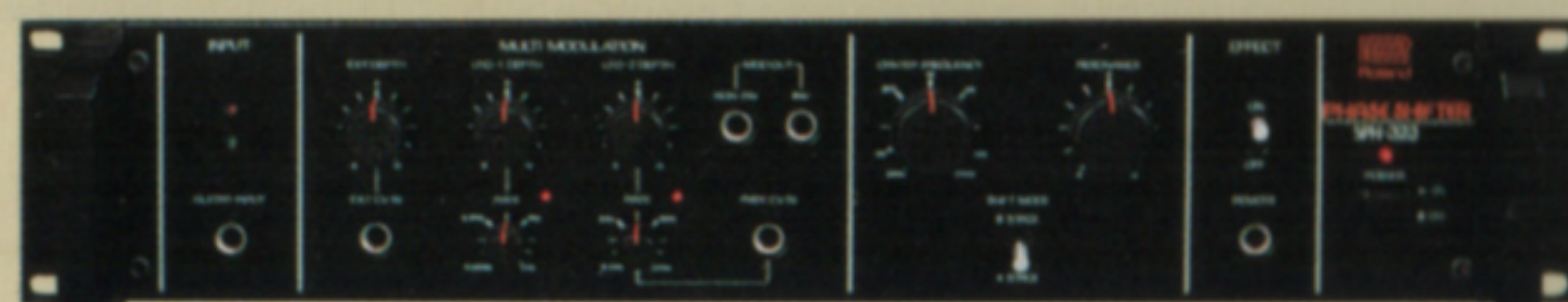
## SDD-320 DIMENSION D



The Dimension D is a specially designed chorus effect for the spatial control of sound. The Roland Dimension D-corder provides four different Dimensional modes for four distinct psychoacoustic results.

- Inputs (Balanced): XLR connector, 26KΩ +4dBm (max +14dBm) +4dBm (max +14dBm) • Outputs (Balanced): XLR connector, 600Ω min +4dBm, Unbalanced; 1/4" phone jack, 600Ω min +4dBm • S/N: Better than 95dB with noise reduction in operation • Dimensions: 482(W) x 92(H) x 247(D)mm (19.0" x 3.6" x 9.7") • Weight: 4Kg (8.8lbs.)

## SPH-323 PHASE SHIFTER



The SPH-323 is a 19" rack mount type phase shifter designed to produce multiple phase shifting effects by means of dual internal low frequency oscillators in combination with an optional external control voltage source.

- Maximum input level/Impedance: < Balanced > +20dBm/15KΩ < Unbalanced > +20dBm/15KΩ < Guitar > +20dBm/1MΩ • Maximum output level/Impedance: < Balanced > +20dBm/200Ω < Unbalanced > +20dBm/600Ω < Guitar amp > +20dBm/3KΩ • Phase shift: < 4-stage > approx. 700° < 8-stage > approx. 1400° • Center frequency sweep range: 50Hz to 15KHz • Frequency response, effect off: 20Hz to 30KHz; ±1dB • Harmonic distortion: < Effect off > 0.004% < 4-stage > 0.015% < 8-stage > 0.02% • Residual noise (JIS "A" Weighting): < Balanced output, effect off > -100dBm < Balanced output, effect on > -80dBm < Guitar output, effect off > -100dBm • Low frequency oscillators: < LFO-1 > 0.02Hz to 5Hz; triangle wave a 10Vp-p < LFO-2 > 0.2Hz to 50Hz; triangle wave a 10Vp-p • Dimensions: 482(W) x 92(H) x 240(D)mm (19.0" x 3.6" x 9.4") • Weight: 4.2Kg (9.24lbs.)

## SIP-301 BASS GUITAR PREAMPLIFIER



The Roland Bass Guitar Preamp was developed to give the bass guitarist the kind of flexibility within his system that has previously been unattainable using conventional bass amplification.

- Input level: HI; min -38dBm (10mV), max +14dBm (4V), LO; min -28dBm (30mV), max +24dBm (12V) • Input impedance: HI; 250KΩ, LO; 100KΩ • Output level: Balanced; nom +4dBm (1.23V), max +20dBm (7.75V), Unbalanced; nom +0.5dBm (820mV), max +16dBm (4.8V) • Output impedance: 600Ω, Unbalanced; 700Ω • Frequency range: 20Hz to 30KHz • S/N: Greater than 74dB (Nominal operating levels) • Distortion: 0.1% (20Hz to 10KHz, +10dBm unbalanced) • Compressor ratio: 1:1 to 1:6.6 • Compressor threshold: -50 to -30dBm (variable) • Compressor dynamic range: max 25dBm (variable) • Hi cut filter cutoff: 6KHz, 12dB/octave • Lo cut filter cutoff: 60Hz, -12dB/octave • Crossover: 50 to 400Hz (variable) • Filter curve: 12dB/octave • Dimensions: 482(W) x 92(H) x 247(D)mm (19.0" x 3.6" x 9.7") • Weight: 4.1Kg (9.02lbs.)

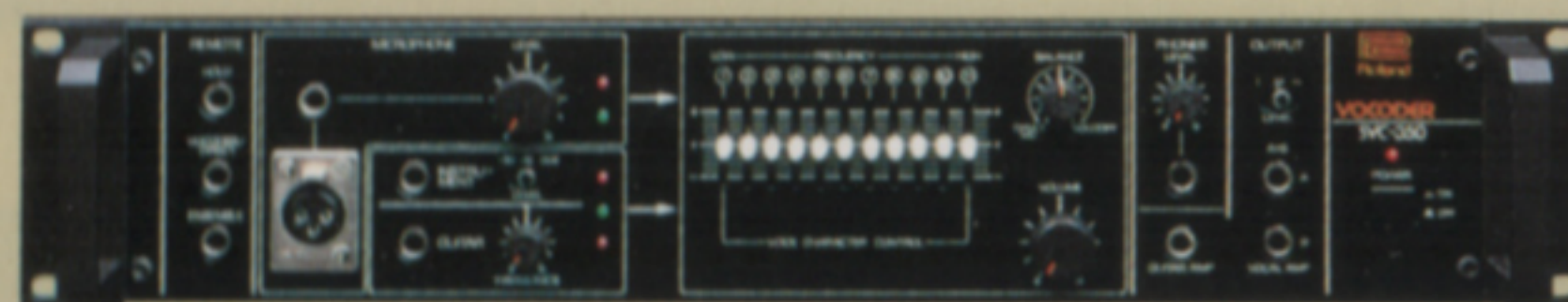
## SBF-325 STEREO FLANGER



The Roland Stereo Flanger is a versatile time delay device that will produce a wide variety of effects ranging from classic flanging to chorus and doubling effects.

- Inputs (Unbalanced): HI; 13KΩ, +4dBm (+20dBm max), LO; 13KΩ, -16dBm (+10dBm max) • Outputs (Unbalanced): HI; 2KΩ, +4dBm (+20dBm, max), LO; 2KΩ, -16dBm (0dBm, max) • Noise level: Better than -70dBm • Bandwidth: 15KHz • Delay time: Flanger; 0.5 to 15mS, Chorus; 0.2 to 20mS • Mode: Flanger 1 (monaural flanging), Flanger 2 (stereo flanging), Flanger 3 (Cross-mix flanging) • Dimensions: 482(W) x 92(H) x 247(D)mm (19.0" x 3.6" x 9.7") • Weight: 4.5Kg (9.9lbs.)

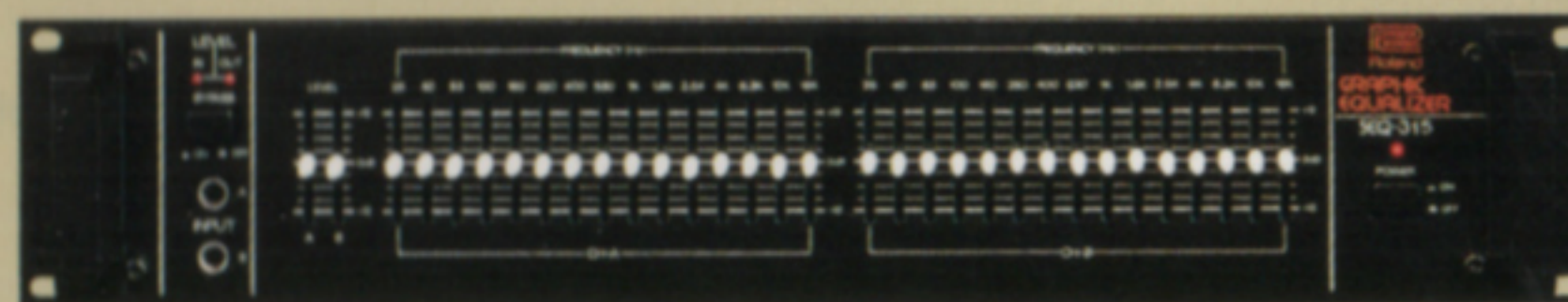
## SVC-350 VOCODER



Roland Vocoder is to analyze the spoken or sung human voice and use this information (or program) to trigger another musical signal (or carrier) giving the instrument the ability to "speak."

- Microphone input (program): 1/4" phone jack or XLR connector 600Ω -54dBm min. • Instrument input (carrier): 1/4" phone jack 100KΩ guitar raw level • Instrument selector switch: 0dBm, -15dBm, -30dBm • Mic level control: -54dB to -14dB • Guitar harmonics control • II element voice control • Guitar amp output: 1/4" phone jack 5KΩ • Mono/Stereo output: 1/4" phone jacks • Dimensions: 482(W) x 92(H) x 350(D)mm (19" x 3.6" x 9.7") • Weight: 5.8Kg (12.8lbs.)

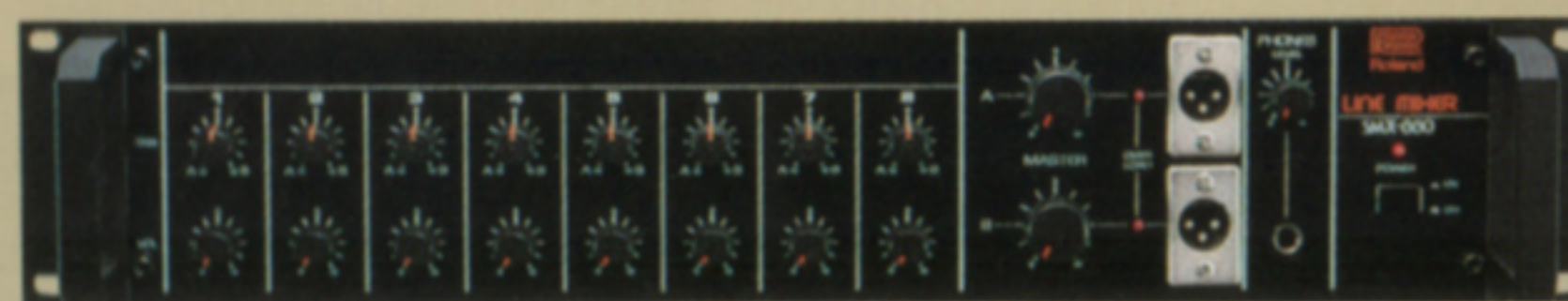
## SEQ-315 STEREO GRAPHIC EQUALIZER



Model SEQ-315 (STEREO) is equipped with two channels, and has a 25Hz to 16KHz frequency range divided into 15 two-thirds octave bands. Level selection switches with 0 and -20dB settings are provided for unbalanced inputs and outputs.

- EQ control range: ±12dB • Level control range: ±12dB • Slider stroke: 30mm with 3 points detented • Frequency response: 25Hz to 16KHz ±1.5dB • Crosstalk: More than 60dB at 1KHz • Distortion: 0.03% typical • Maximum input level: < SW 0dB > +20dBm at slider 0dB < SW -20dB > 0dBm at slider 0dB • Impedance: < Balanced > 26KΩ < Unbalanced > 100KΩ • Maximum output level: +20dBm • Output load impedance: < Balanced > More than 600Ω < Unbalanced > more than 10KΩ • S/N: 80dB • EQ center frequencies: 25, 40, 63, 100, 160, 250, 400, 630, 1K, 1.6K, 2.5K, 4K, 6.3K, 10K, 16K, Alternate one-third octaves centers • Dimensions: 482(W) x 92(H) x 350(D)mm (19.0" x 3.6" x 13.8") • Weight: 4.3Kg (9.46lbs.)

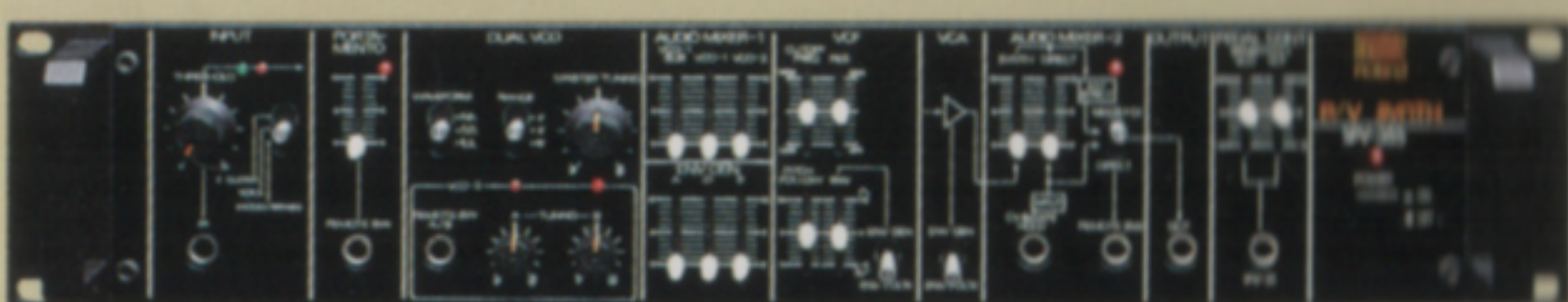
## SMX-880 LINE MIXER



Equipped with eight input channels, two output channels and a stacking input for a wider application range. Equipped with a standard jack for input, and standard jacks (-20dBm/+4dBm selected) and XLR balanced connectors (+4dBm) capable of handling two output channels for parallel output connections.

- Frequency response: 20Hz to 70KHz ±1dB • Distortion: 0.1% typical less than 0.3% • Balanced outputs: < Maximum output level > +20dBm at 600Ω load < Output impedance > 600Ω ±10% < Load impedance > More than 600Ω • Unbalanced outputs: < Maximum output level > +20dBm at 600Ω load < Output impedance > Less than 1KΩ < Load impedance > More than 10KΩ • Input level (SW-20dBm): Normal -20dBm, maximum 0dBm • Input level (SW +4dBm): Normal +4dBm, maximum +24dBm • Input impedance: SW -20dBm 90KΩ, SW +4dBm 30KΩ • Bus input level: +24dBm • Bus input impedance: More than 500KΩ • S/N: 80dB • Dimensions: 482(W) x 92(H) x 350(D)mm (19.0" x 3.6" x 13.8") • Weight: 4.8Kg (10.56lbs.)

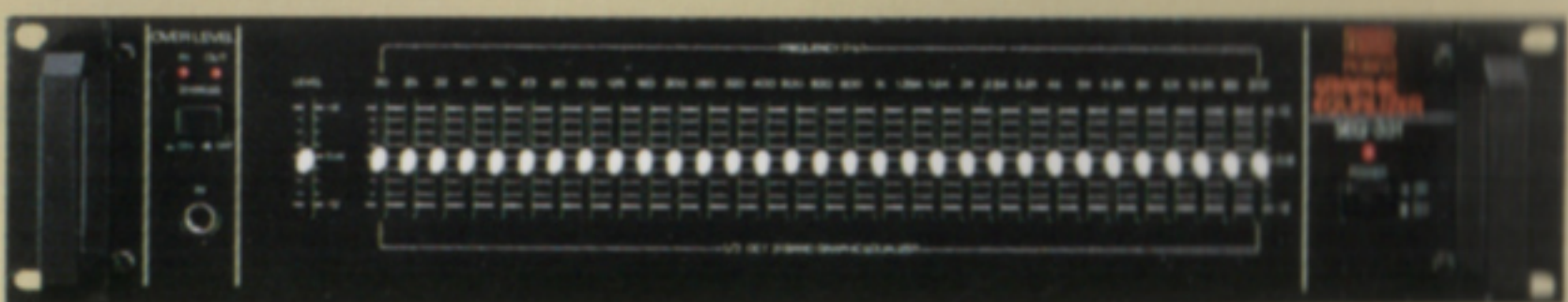
## SPV-355 P/V SYNTHESIZER



The SPV-355 is a Pitch-to-Voltage Converter with a self-contained synthesizer. The P/V Synthesizer will accept any conventional audio signal and convert it into a voltage that is used to control the synthesizer.

- Waveform: /, □, ▽, ▽ • Range switch: 4', 8', 16' • Master tuning: ±250 cents • A Tuning: ±1200 cents • B Tuning: ±1200 cents • VCO-1 sub: 1 octave down, Portamento control: 0 to 3S • Cutoff frequency control: 10Hz ~ 20KHz • Resonance control: 0 to self oscillation • Attack time: 1mS to 3.5S • Decay time: 2mS to 7S • Sustain level: 0 to 100% • Input jack: 1 • Output jack: 1 (Input/Output level = 1:1) • CV out jack: 1V/oct. • GATE out jack: Off = 0V, On = +15V • ENV fol' out jack: 0 to +10V • CV in jack: 1V/oct. • GATE in jack: Threshold +3.8V • Dimensions: 482(W) x 92(H) x 350(D)mm (19.0" x 3.6" x 13.8") • Weight: 5.7Kg (12.5lbs.)

## SEQ-331 GRAPHIC EQUALIZER



Model SEQ-331 (MONO) covers a 20Hz to 20KHz frequency range with 31 one-third octave bands for extremely precise and versatile tone control.

- EQ control range: ±12dB • Level control range: ±12dB • Slider stroke: 30mm with 3 points detented • Frequency response: 20Hz to 20KHz ±1.5dB • Distortion: 0.03% typical • Maximum input level: < SW 0dB > +20dBm at slider 0dB < SW -20dB > 0dBm at slider 0dB • Impedance: < Balanced > 26KΩ < Unbalanced > 100KΩ • Maximum output level: +20dBm • Output load impedance: < Balanced > more than 600Ω < Unbalanced > more than 10KΩ • S/N: 80dB • EQ center frequencies: 20, 25, 32, 40, 50, 63, 80, 100, 125, 160, 200, 250, 320, 400, 500, 630, 800, 1K, 1.25K, 1.6K, 2K, 2.5K, 3.2K, 4K, 5K, 6.3K, 8K, 10K, 12.5K, 16K, 20K, Alternate one-third octaves centers • Dimensions: 482(W) x 92(H) x 350(D)mm (19.0" x 3.6" x 13.8") • Weight: 4.2Kg (9.24lbs.)

## ACCESSORIES

### CARRYING CASES

Carrying cases for 6 and 3 units and 1 unit are available.



\* Specifications and appearance subject to change without notice.

**Roland**

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WE DESIGN THE FUTURE

# ROLAND ECHO MACHINES & THE ROLAND RACKS



Electronic Musical Instruments



# ROLAND ECHO MACHINES

## SRE-555 CHORUS ECHO

Built for mounting on a standard 4U 19" rack (EIA standards). Ideal for both stage and studio. A new slide system allows tape replacement while the unit is mounted on the rack by simply removing two screws with a coin. XLR balanced connectors are used for both inputs and outputs.

An advanced noise reduction system gives this unit a 77dB S/N ratio for a clearer echo. Delays from 0.55 to 1.8 seconds are possible in the Sound-on-Sound mode.

• Input level/Impedance: < Input 1 (XLR) > +4dBm/30K $\Omega$ , < Input 2 (1/4" Phone jack) > 0dBm/47K $\Omega$ , -25dBm/220K $\Omega$ , -50dBm/6.6K $\Omega$  • Output Level/Load Impedance: < Output (XLR) > +4dBm/Over than 600 $\Omega$  < Output A, B (1/4" Phone Jack) > 0dBm, -25dBm -50dBm/Over than 5K $\Omega$  (0dB = 0.775V)

• Input jacks: XLR, 1/4" Phone jack • Output jacks: XLR, 1/4" Phone jack x 2 • Cancel remote jacks: Input 2 effect, Chorus, Echo, S on S, Single delay • Control: Input volume (Input 2), Chorus intensity, Echo/S on S volume, Echo/S on S intensity, Echo/S on S repeat rate, Reverb volume, Effect tone (Treble bass) • Dimensions: 480(W) x 180(H) x 445(D)mm (18.9" x 7.1" x 17.5") • Weight: 15.7Kg (34.54lbs.) • Accessories: Connection cord x 2, Endless tape (RT-1L), Head cleaner



## RE-501 CHORUS ECHO

The most advanced Roland Echo Chamber, the RE-501 gives you total performance versatility. Change effects instantly, give even small rooms auditorium-like acoustics, make a six-string guitar sound like a 12-string or create delays of up to 1.8 seconds with its exclusive sound-on-sound feature. And it's all so easy with the RE-501. This sophisticated echo/reverb/chorus unit lets you control and mix sounds at will. XLR balanced connectors for inputs and outputs, advanced LED metering and host of other professional features make it one of the most attractive units of its type available today. Its Chorus Section turns solos into a chorus by broadening the sound through a BBD delay line. And with its great S/N

ratio and special noise reduction circuitry, sounds always sound like they should.

• Input level/Impedance: < Input 1 (XLR) > +4dBm/30K $\Omega$  < Input 2 (1/4" Phone jack) > 0dBm/47K $\Omega$ , -25dBm/220K $\Omega$ , -50dBm/6.6K $\Omega$  • Output level/Load impedance: < XLR > +4dBm/Over than 600 $\Omega$  < Output A, B (1/4" Phone jack) > 0dBm, -25dBm, -50dBm/Over than 5K $\Omega$  (0dB = 0.775V) • Input jack: XLR, 1/4" Phone jack • Output jack: XLR, 1/4" Phone jack x 2 • Cancel remote jacks: Input 2 effect, Chorus, Echo, S on S, Single delay • Control: Input volume (Input 2), Chorus intensity, Echo volume, S on S volume, Echo/S on S intensity, Echo/S on S repeat rate, Reverb volume, Effect tone (treble, bass) • Dimensions: 418(W) x 190(H) x 330(D)mm (16.5" x 7.5" x 13.0") • Weight: 10.5Kg (23.1lbs.) • Accessories: Connection cord x 2, Endless tape (RT-1L), Head cleaner



## RE-201 SPACE ECHO

With its three independent input channels, each with separate volume controls, three-spring reverb, free running tape system to reduce wow and flutter and 12-mode (4 echo, 7 reverb/echo, 1 reverb effect) selection, the RE-201 offers serious musicians maximum creative control with its host of design and engineering refinements. Echo repeat rate, Echo intensity and Echo volume are all variable. Bass and treble Echo tone can be set without affecting the original sound. Rugged, reliable and versatile, the RE-201 is Roland's most popular echo chamber, used by professionals though the world.

• Channels: 3 • Inputs: Microphone, Instrument, From PA • Output: Direct, Foot switch • Controls: Mode selector (Rotary type 12-mode), Echo volume, Echo intensity, Echo repeat rate, Effect tone (treble, bass), Output level change switch • Dimensions: 415(W) x 185(H) x 275(D)mm (16.3" x 7.3" x 10.8") • Weight: 9.5Kg (20.9lbs.) • Accessories: Connection cord x 2, Foot switch (FS-1), Endless tape (RT-1), Cleaner, Vinyl cover.



## RE-150 SPACE ECHO

The economical unit shares many of the same features as our more expensive models, including separate controls for rate, intensity, echo, and volume. Six different echo modes are available. The instrument channel can be controlled by a foot switch, for more convenient three-channel mixing. Dual outputs for direct and echo expand versatility even more. Easily portable with a rugged, self-contained carrying case.

• Channels: 3 • Inputs: Microphone x 2, Instrument • Output: Direct, Echo • Foot switch (Echo cancel, Instrument echo/Normal) • Controls: Microphone volume x 2, Instrument volume, Mode selector (Repeat 1 to 3, Single 4 to 6), Echo volume, Echo intensity, Echo repeat rate, Output level change switch (-15dB, -25dB, -35dB) • Dimensions: 425(W) x 185(H) x 290(D)mm (16.7" x 7.3" x 11.4") • Weight: 8.2Kg (18.0lbs.) • Accessories: Connection cord x 2, Foot switch (FS-1), Endless tape (RT-1), Cleaner, Vinyl cover.



## SDE-2000 DIGITAL DELAY

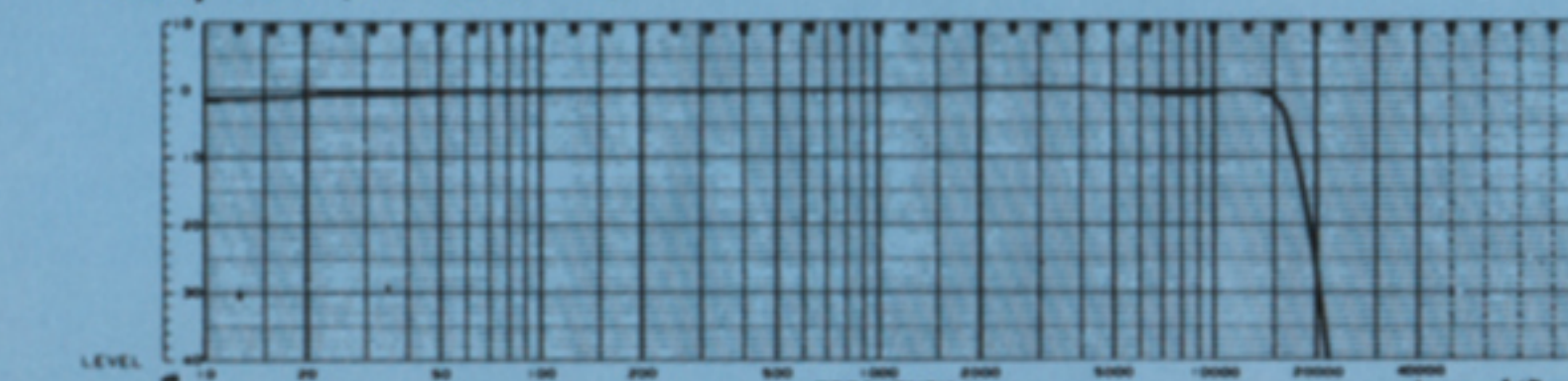
The Roland Digital Delay offers more flexibility over all delay parameters (Flanger, Chorus and Echo, etc.). Delay time can be set from 0 to 640ms at will. Contained within the device are controls for Modulation (enabling sweep in the Flanger and Chorus modes), and Feedback, which regenerates the signal for more intensity in the Flanger and Chorus modes and allows multiple-decaying echoes long delay setting. SDE-2000's signal processor has a large capacity memory system (16K-byte RAM) and high-resolution A/D convertor (12-bit) which provides low-noise and high-fidelity sound over the full band width. Delay time can be controlled sequentially at 1mS steps, and is displayed in the window of the Digital Display. Several remote jacks are provided for live performances.

• Input level/Impedance: < Input jack > +4dBm (Max. +29dBm), -20dBm (Max. +5dBm)/56K $\Omega$ , < Feedback return > +4dBm (Max. +19dBm)/78K $\Omega$  • External CV input jack: < Input voltage (Max.) > 0 to 10V ( $\pm 20V$ ), < Input impedance > 90K $\Omega$  • Output level/Impedance: < Output jack > +4dBm at 600 $\Omega$  (Max. +18dBm), -20dBm at 10K $\Omega$  (Max. -8dBm)/100 $\Omega$  at +4dBm, 650 $\Omega$  at -20dBm (Output mixed), 550 $\Omega$  at -20dBm (Output delay), < Feedback send > +4dBm at 600 $\Omega$  (Max. +16dBm) • Delay time: 0 to 640ms (variable) 1mS/pitch • Frequency response: < Direct > 10 to 20KHz (-1dB), < Delay > 10 to 15KHz (-3dB, 0 to 320ms), 10 to 7.2 KHz (-3dB, 0 to 640ms) • S/N: < Direct > 90dB (IHF-A), < Delay > 80dB (IHF-A) • Total Distortion: < Direct > 0.05%, < Delay > 0.08% TYP • Memory capacity: 12-bit (16K-byte) • Dimensions: 482(W) x 47(H) x 355(D)mm (19.0" x 1.85" x 14.0") • Weight: 5.5Kg (12.1lbs.) • Accessory: Connection cord

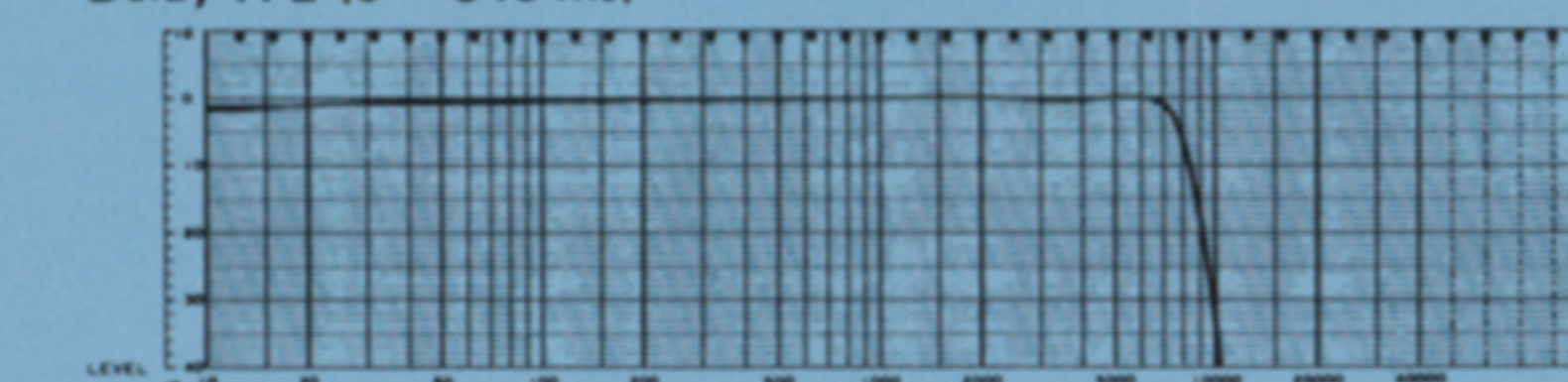


### Frequency Response

Delay X 1 (0 ~ 320 ms)



Delay X 2 (0 ~ 640 ms)



Direct

